



Oil-free | Catalytic converter BEKOKAT® CC-018

Constant oil-free and germ-free compressed air thanks to compact and certified catalytic converter technology: BEKOKAT® CC-018

Highest possible process safety

Would you like to eliminate compromises with regard to the compressed air quality in the laboratory or in your production processes? Would you like to ensure that the compressed air complies with ISO Class 1 oil content or even better at all times, that it does not contain any oil or any germs? Then the TÜV certified and verified by neutral institutes BEKOKAT® catalytic converter is an interesting solution. Thanks to its compact design, the BEKOKAT® CC-018 can now be integrated directly at the application, thus guaranteeing top compressed air quality at all times, efficiently and reliably.

Certified safety and reliability thanks to oil-free and germ-free compressed air

The higher the demands on the quality of compressed air, the greater the quality management demands on the devices used and the respective proofs. BEKO TECHNOLOGIES has had the performance capability of the BEKOKAT® confirmed and certified by means of elaborate tests conducted by independent institutes. Together with TÜV Nord, proof was brought under real operating conditions to confirm that compressed air which is processed and treated with the BEKOKAT® exceeds the specification according to Class 1 oil content of the ISO 8573-1. In a second series of trials, it was confirmed that compressed air contaminated with bacteria is germ-free following treatment in the BEKOKAT®. No living bacteria could be identified or verified in the compressed air flow after the treatment process.

- › Highest possible process safety through continuous process monitoring
- › Constant germ-free and oil-free compressed air to Class 1 oil content or even better according to ISO 8573-1
- › Safe partial work load operation between 20 % to 100 %
- › Direct availability even after operational breaks thanks to the stand-by function
- › Lower energy consumption by utilising efficient heat recovery
- › Simplified operation and unambiguous display for current operating statuses
- › Independent of ambient temperature, air humidity and oil input concentration
- › Flexible set-up
- › Easy to retrofit to existing plants without replacing the existing compressors



The efficiency of the BEKOKAT® catalytic converter has been certified by TÜV and validated by neutral institutes

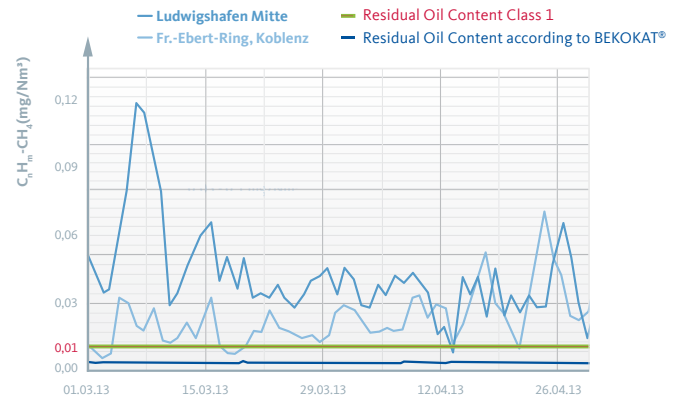
Better through Responsibility



BEKOKAT® – for constant oil-free and germ-free compressed air, independently of ambient conditions

The intake air for the compressed air generation is usually loaded with hydrocarbons. This means that a processing and treatment solution is required even with oil-free compressed air generation. The BEKOKAT® provides constant oil-free compressed air which is better than Class 1 oil content according to ISO 8573-1.

In the catalytic converter, the hydrocarbons present in the air are oxidised by catalyst using the oxygen in the air no matter whether they are in gas, vapour or aerosol form. It is therefore not important which origin they have.



An oil-free compressed air generation cannot solely ensure constant Class 1 or even better due to the ambient conditions.

Class 1 oil content according to ISO 8573-1 or better

Conventional compressed air processing and treatment has technical and economical limits with highly sensitive applications.

BEKOKAT® achieves constant oil-free compressed air with a maximum residual oil content of a barely measurable 0.001 milligrams per cubic metre. With this performance, the BEKOKAT® devices even surpass the most stringent specifications of ISO 8573-1, Class 1 with regard to oil content. A quality that is especially required in particularly demanding production processes e.g. in the food, pharmaceutical, automotive and electronics industries.

Compact, economical and reliable

With the BEKOKAT® CC-018, the concept that has been proven for decades has now been implemented in a very compact design.

This makes it possible to provide oil-free compressed air of Class 1 or better economically, even in the laboratory, directly at laser applications or for treating sensitive part air flow e.g. for breathing air supplies in painting cabins.

The integrated control reliably ensures that the compressed air quality required is met at all times.

Corrosion-protected casing

Durable high-performance catalyst material

Effective insulation saves energy

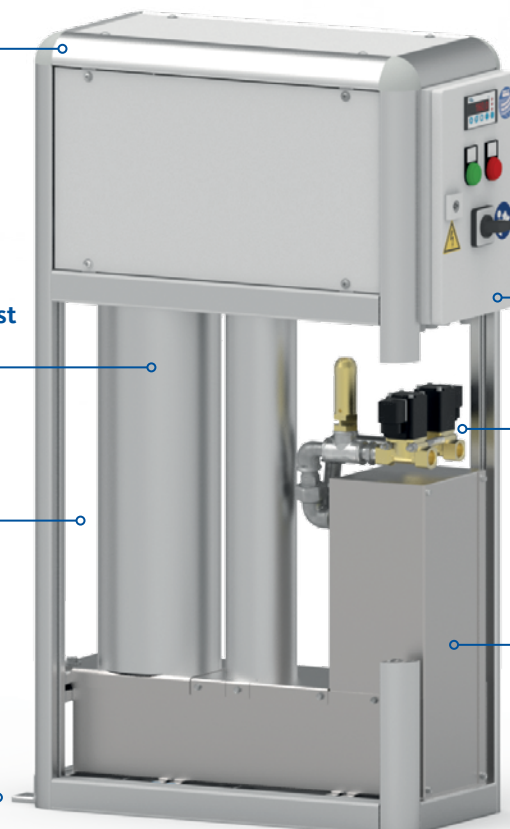
Simple transportation and safe setting up

Clear control elements indicate the current operating state

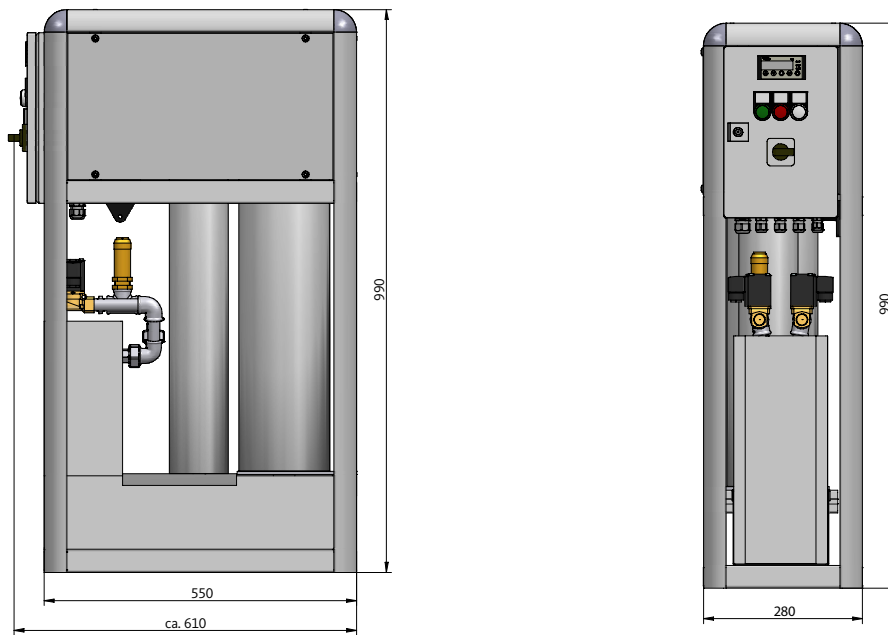
Stand-by circuit ensures complete safety even after interruptions in operation

Connections on the front and easy access for straightforward service

Heat recovery ensures high energy efficiency



Technical data:



Technical data BEKOKAT® CC-018-PN11	
Product name	BEKOKAT® catalytic converter
Model	BEKOKAT® CC-018-PN11
Medium	Compressed air, free of aggressive, corrosive, caustic, toxic, flammable or combustion supporting materials and substances. Compressed air up to 100 % saturated, free of water or condensate
Ambient temperature	+5 °C to +45 °C, rel. humidity ≤ 75 %, non-condensing
Compressed air temperature at INLET	+5 °C...+45 °C
Compressed air temperature at OUTLET	10K...15K above inlet temperature
Max. reactor temperature	230 °C
Operating overpressure	4...11 bar(gauge)
Safety valve	DN15, setting value: 11 bar
Min. volume flow rate at INLET	18 normal ³/h (ISO 1217) at operating pressure = 7.0 bar(gauge)
Max. differential pressure	≤ 0.3 bar at 100 % load and 7.0 bar(gauge)
Power supply	230 VAC / 50 Hz / ± 10 %
Maximum operating current	2.50 A
Power consumption	575 W
Connection	G1/2" internal thread, according to ISO 228-1
Dimensions W x H x D	280 mm x 990 mm x 610 mm
Weight	61 kg

Note:
At inlet temperatures above +45°C temperatures of >+60°C can occur at the outlet of the BEKOKAT®. The downstream components must be designed accordingly.

BEKOKAT®: The solution for highly sensitive processes

The oil content is defined according to classes in accordance with ISO 8573. All the oil is reliably broken down by the catalytic converter splitting process in the BEKOKAT®. This enables Class 1 or better to be achieved. If in the event of an accident

the amount of oil that occurs is so large that the compressed air can no longer be processed reliably, close the precision valves and prevent any other oil leakage.



Compressed air makes ice cream even creamier

The "bit extra" in ice cream production refers to the injection of compressed air into the basic ice cream mass in order to give it its cream-like, creamy consistency.

The compressed air comes into very intensive contact with the ice cream in this process. The smallest oil content or also some germs will make the ice cream uneatable.



Oil-free for successful recovery

The strictest hygiene measures apply in the production of medicines. This also of course applies for the compressed air required. This is utilised e.g. for producing

tablets. Compressed air is used to remove dust after the tablet press. Oil content in the compressed air is hereby not only a hygienic problem, rather more it can also lead to swelling of the pressed tablets.



Oil-free for a perfect paint finish

The automotive industry places extremely high demands on the quality of the compressed air in the paint shop.

The process air comes into intensive contact with the paint on the surface area. Every very small contamination can result in irregularities in the paint finish.



For technology which functions

The electronics industry uses compressed air e.g. as a transport and cleaning medium or as an energy source for compressed air tools. Every application results in enormous requirements for the cleanness of the compressed air. Even

the slightest contaminations can result in faulty products when printed circuit boards are exposed to light. Absolutely oil-free compressed air is one of the most important prerequisites for fault-free production.

Do you have questions about the best way of processing your compressed air?

We have the answers! We offer efficient solutions for any type of processing chain. Please contact us with all your queries. We would be delighted to tell you more about our condensate

treatment, filtration, drying, measuring and process technology, and our comprehensive services.

Visit us at



BEKO TECHNOLOGIES GMBH
Im Taubental 7 | D-41468 Neuss

Tel. +49 2131 988 - 1000
info@beko-technologies.com
www.beko-technologies.de



Subject to technical changes without prior notice. Errors and omissions excepted.